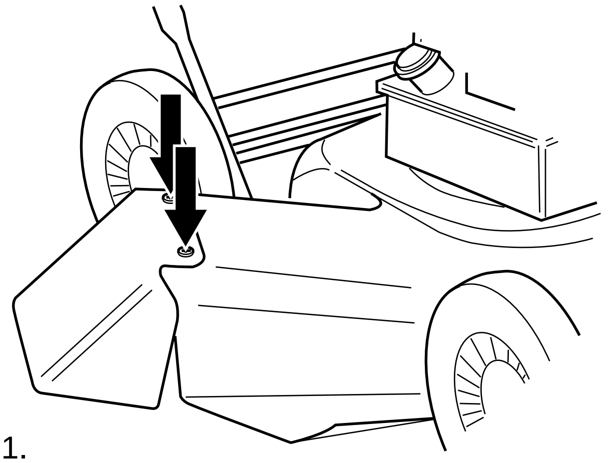
STIGA

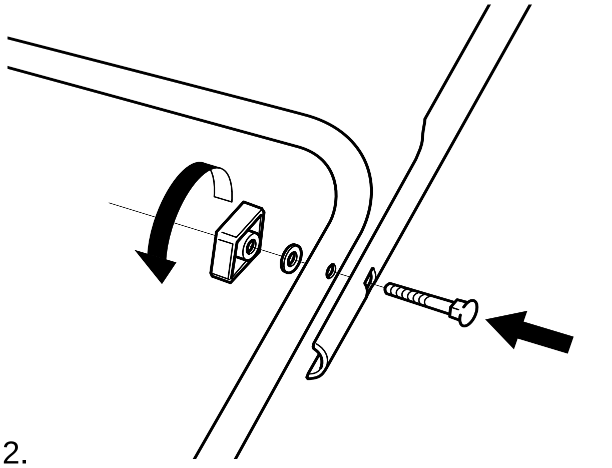


TORNADO 45

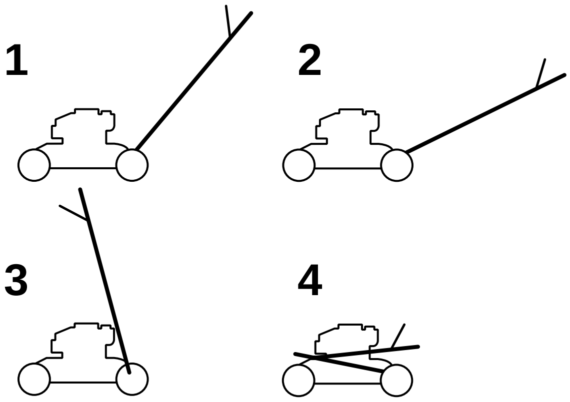
8211-3389-07



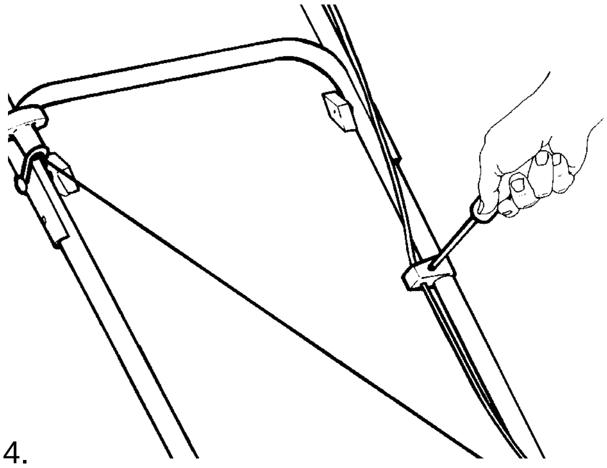
1.



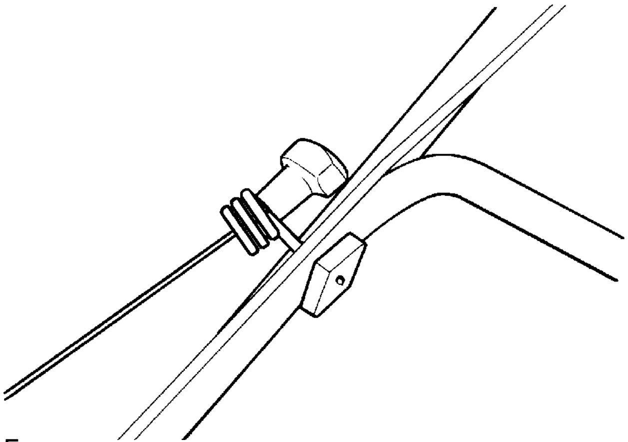
2.



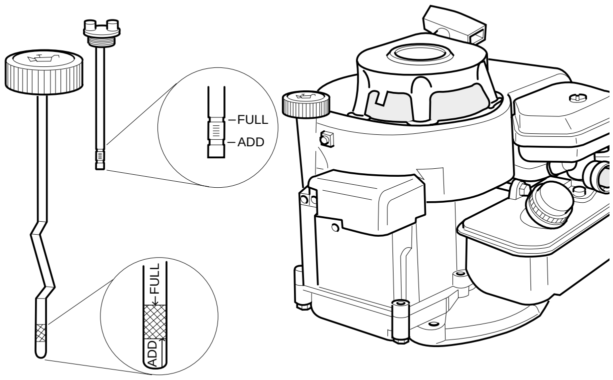
3.



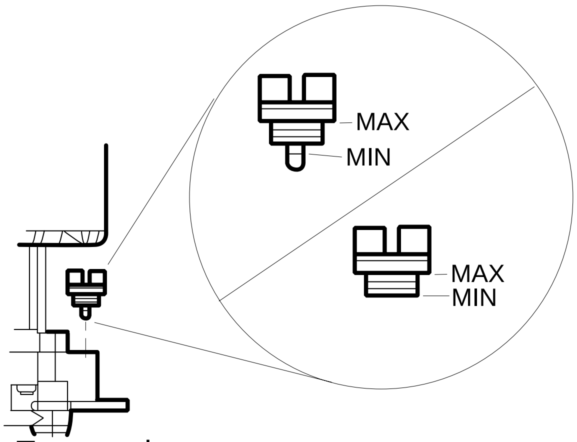
4.



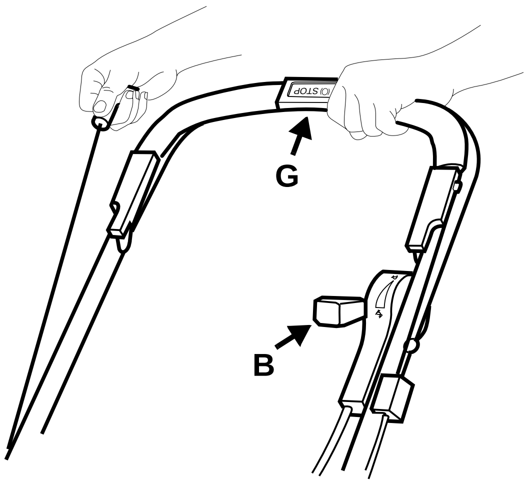
5.



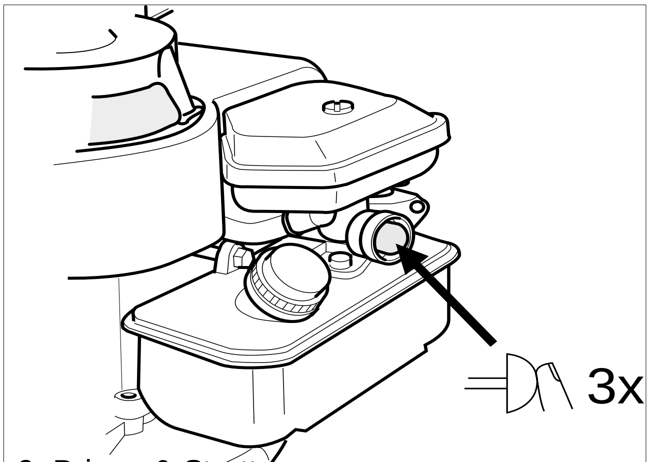
6. Briggs & Stratton



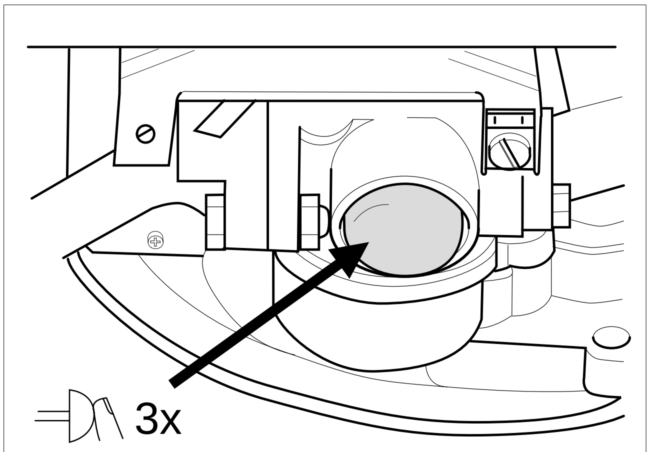
7. Tecumseh



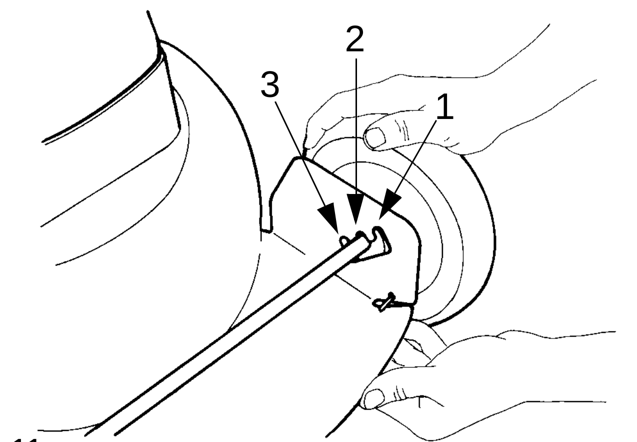
8.



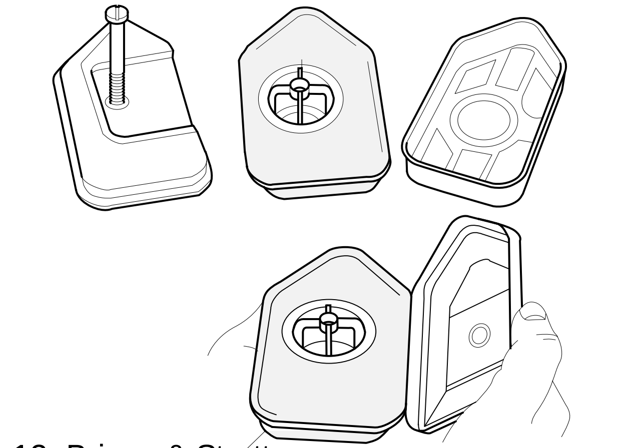
9. Briggs & Stratton



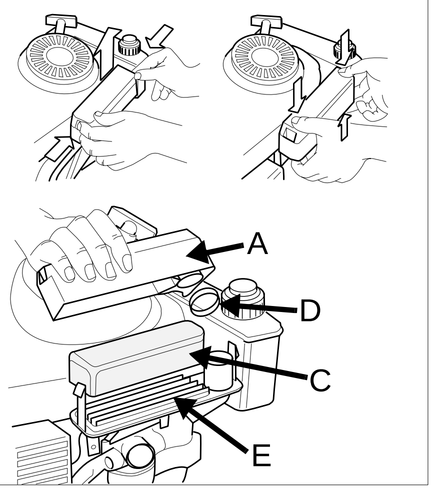
10. Tecumseh



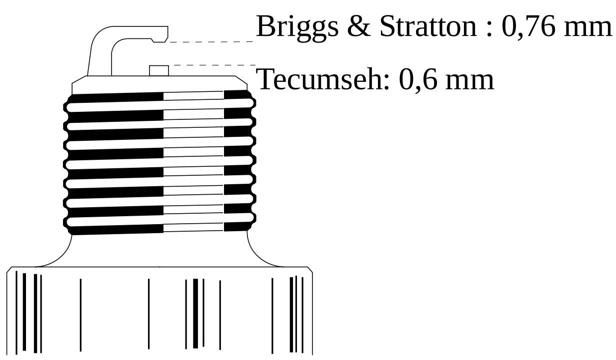
11.



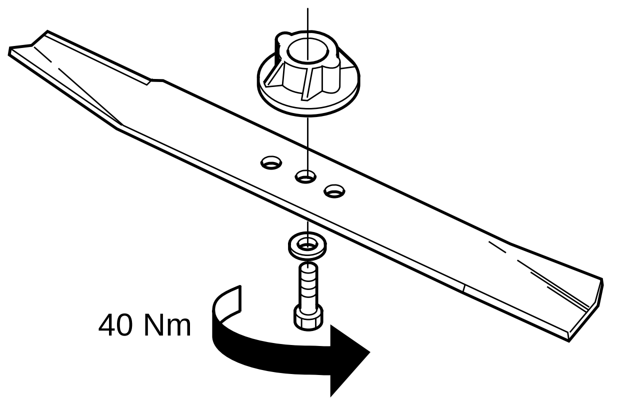
12. Briggs & Stratton



13. Tecumseh



14.

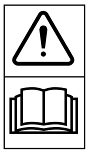


15.

SYMBOLS

The following symbols are displayed on the machine in order to remind you about the safety precautions and attention necessary when using the machine.

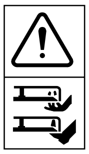
The symbols mean:



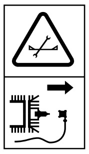
Warning! Read the Instruction Book and Safety Manual before using the machine.



Warning! Keep spectators away. Beware of objects being flung out.



Warning! Do not put hands or feet under the cover of the machine when it is running.



Warning! Before starting any repair work, remove the spark plug cable from the spark plugs.

IMPORTANT

Certain models do not have a throttle. The motor speed is set for optimal function and minimal exhaust emissions.

ASSEMBLING

EJECTION SHIELD

Under no condition must the machine be started without the ejection shield being fitted on the machine. If it is not fitted, stones and other flying objects may easily be ejected by the rotating blade.

The parts for assembly of the ejector shield are attached to the packaging. Remove the parts and assemble the ejector shield according to fig. l. Tighten the screws securely.

HANDLEBAR

Hinge up the lower part of the handlebar.

The components for assembling the upper section of the steering are fitted for packing purposes. Remove the components from the lower section of the steering.

Then attach the upper part of the handlebar with screws, washers and locking knobs (fig. 2).

The handlebar has four different positions. Release the catch with the foot and move the handlebar to the desired position (fig. 3).

1. For normal mowing.
2. For mowing under trees, shrubs etc.
3. Parking position.
4. Transportation and storage position. The handlebar takes up less room if the locking knobs are loosened and the handlebar folded in.

CABLE HOLDER

Put the wires into the cable holder (fig. 4).

EYELET FOR STARTER HANDLE

Attach the starter handle to the eyelet on the steering handle (fig. 5).

USING THE MOWER

BEFORE STARTING

FILL THE CRANKCASE WITH OIL

The lawn mower is delivered without any oil in the engine crankcase. The crankcase must, therefore, be filled with oil before the engine is started the first time.

Remove the oil dipstick (fig. 6, 7).

Fill the engine's crankcase with 0.6 litres of good quality oil (service class SE, SF or SG) Use SAE 30 or SAE 10W-30 oil.

Fill until the oil reaches the “FULL/MAX” mark on the dip stick. Do not fill with too much oil.

CHECKING THE OIL LEVEL

Check before using the machine that the oil level is between “FULL/MAX” and “ADD/MIN” on the dipstick. Stand the lawn mower on a level surface.

Briggs & Stratton:
Remove and dry the dipstick (fig. 6). Slide it down completely and tighten it. Unscrew and pull it up again. Read-off. If the oil level is low, fill with oil up to the “FULL/MAX” mark.

Tecumseh:
Clean the area round the oil plug, then remove the plug (fig. 7). If the oil is not level with the edge of the hole, carefully pour in clean oil. Replace the oil plug.

FILL UP THE PETROL TANK

Fill with petrol before starting the engine. Never remove the filler cap or fill with petrol while the engine is running or still warm.

Never fill the fuel tank completely full but allow a little room for the petrol to expand.

Always use pure unleaded petrol. You must never use 2-stroke petrol mixed with oil.

Note that you should always remember that petrol is a perishable commodity. Never buy more petrol than what you can use up in 30 days.

STARTING THE ENGINE

1. Place the lawn mower on flat, firm ground. Do not start in high grass.
2. Make sure the spark plug lead is connected to the spark plug.
3. If the lawn mower is equipped with a throttle lever, set throttle lever **B** in full throttle position (fig. 8).
4. When starting a cold engine: Press down the primer fully three times (fig. 9, 10).

   When starting a warm engine the primer does not need to be used. If the engine stops due to a lack of petrol, refill and press down the primer three times.
5. Press in the Start/Stop-loop **G** against the steering. Note that the Start/Stop loop **G** must be kept pressed-in to prevent the engine from stopping (fig. 8).
6. Grasp the starter handle and start the engine by pulling briskly on the starter handle.
7. To achieve the best cutting results, you should always run the engine at full-speed.

Keep hands and feet well away from the rotating blade. Never put your hand or foot under the blade casing or in the grass evacuation unit while the engine is running.

STOP OF ENGINE

The engine may be very warm immediately after it is shut off. Do not touch the silencer, cylinder or cooling flanges as it can cause burns and injury.

1. Release Start/Stop-loop **G** (fig. 8) to stop the engine. This loop must not be disengaged(e.g. through fixing it in the depressed position against the steering), as the engine cannot be stopped.
2. If the lawn mower is left unattended to, remove the lead from the spark plug.

CUTTING HEIGHT

Shut off the engine before adjusting the cutting height.

Do not set the cutting height so low that the blade can hit uneven ground.

Avoid mowing when the grass is wet. The grass then sticks to the underside of the casing, giving poor mowing results.

The cutting height can be adjusted to three positions by moving the wheel axles (fig. 11).

If the start/stop loop no longer works, stop the engine by removing the lead from the spark plug. Immediately take the lawn mower to an authorised workshop for repairs.

MAINTENANCE

No service is to be made on the engine or lawn mower without first switching off the engine and removing the spark plug cable from the spark plug.

Stop the engine and remove the spark plug cable if the mower is to be lifted, e.g. with transportation.

If the machine is to be tilted the fuel tank must be emptied and the sparking plug of the engine kept upwards.

CLEANING

After each time it is used the mower should be cleaned. This is particularly important on the underside of the mower casing. Wash out with the garden hose. The mower will then last longer and function better.

High pressure washing units should not be used. If grass has dried on to the mower casing it can be removed by scraping. If necessary, give the underside a touch of paint to prevent rusting.

Clean the silencer and the surrounding area regularly to remove grass, dirt and flammable waste products.

COOLING SYSTEM

Before use, the engine's cooling system should be cleaned. Clean the cylinder's cooling fins and the air intake, removing any grass cuttings, dirt and the like.

CHANGING OIL

Change the oil when the engine is warm and the petrol tank is empty. Hot oil will run out of the engine better. Use caution when draining the hot oil, as it could cause burn injuries.

Change the oil the first time after 5 hours of operation, and subsequently after every 50 hours of operation or once a season. Remove the dip stick, tilt the mower and let the oil run out into a container. Be careful not to let any oil run on to the grass.

Fill with new oil: use oil of SAE 30 or SAE 10W-30 quality. The crankcase holds approx. 0.6 litre. Fill until the oil reaches the "FULL/MAX" mark on the dip stick.

AIR FILTER

A dirty and blocked air filter reduces the engine output and increases engine wear.

Briggs & Stratton:
Carefully remove the air cleaner so that no dirt falls down into the carburettor (fig. 12). Take out the foam plastic filter element and wash it in liquid detergent and water. Dry the filter element. Pour a little oil on the filter element and squeeze it in. Refit the air cleaner.

Wash the filter every three months or every 25 hours running, whichever comes first, or more frequently if used in dusty conditions.

Tecumseh:
Check the air filter after every 25 hours of use, more often if the engine is used in dusty conditions. If the foam filter is dirty or blocked it should be replaced.

Dismantle the cover **A**. Clean inside the cover **A** and the filter support **E**, (fig. 13). Soak the foam filter **C** with two teaspoons (approx. 20 ml) of engine oil. Massage the filter with a clean cloth to remove any excess oil. Also check the seal **D**, replace it if damaged or deformed.

Refit the cover **A**.

SPARKING PLUG

Never remove the spark plug or the ignition lead when checking to see if there is any spark, always use an approved test instrument.

Clean the sparking plug regularly (every 100 hours running). Use a wire brush for cleaning and adjust the correct spark gap (fig. 14).

Change the sparking plug if the electrodes are excessively burnt or if the plug is damaged. The recommendations of the engine manufacturers are as follows:

Champion J19LM (RJ19LM) or another equivalent spark plug ought to be used in Briggs & Stratton engines. Spark gap 0.76 mm.

Champion RJ17LM, RJ19LM or another equivalent spark plug ought to be used in Tecumseh engines. Spark gap 0.6 mm.

CHANGING BLADES

Use protective gloves to prevent cuts when changing the blade.

Blunt and damaged blades tear off the grass and spoil the look of the lawn after mowing. New, well sharpened blades cut the grass cleanly, so that the lawn looks green and fresh even after mowing.

Always check the blade after an impact. First disconnect the ignition cable. If the blade system has been damaged the defective parts must be changed. Always use genuine spare parts.

To replace the blade, slacken the blade bolt. Fit the new blade so that the stamped STIGA logotype is turned facing the blade attachment (and not facing the grass). Refit the washer and blade bolt. Tighten the blade bolt fully to a torque of 40 Nm (fig. 15).

When replacing the blade, the blade bolt should also be replaced.

The guarantee does not cover damage to the blade, blade holder or engine caused by running into obstacles.

When replacing the blade, the blade holder and blade bolt, always use original spare parts. Non-authentic spare parts could lead to the risk of personal injury or damage, even if they fit the machine.

SHARPENING OF THE BLADE

Sharpening of the blade must be done by wet method grinding, using a whetstone or a grindstone.

For the sake of safety, the blade should not be sharpened on an emery wheel. A very high temperature could cause the blade to become brittle.

Once the blade has been sharpened, it must then be balanced so as to avoid vibration damage.

STORAGE

WINTER STORAGE

Empty the fuel tank. Start the engine and let it run until it stops. The same petrol must not remain in the tank for more than one month.

Tip up the mower and screw out the sparking plug. Pour a teaspoon of engine oil in the sparking plug hole. Pull out the starting handle slowly so that the oil is distributed in the cylinder. Screw in the sparking plug.

Thoroughly clean the mower and store it indoors in a dry place.